

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) ~~A mobile agent device in a Mobile Virtual Private Network, said device comprising~~ module for providing in a Mobile Virtual Private network mobility for a remotely connecting node moving between an external network and an internal network, the module comprising:

a mobile agent device positioned at the ends of the internal network, the mobile agent adapted for:

- a. termination of a Mobile IP tunnel from a~~the~~ remotely connecting Mobile Node;
- b. termination of an IPsec VPN tunnel from the remotely connecting Mobile Node, the IPsec VPN tunnel used for tunnelling to the mobile agent traffic intended for a destination node within the internal network;
- c. dynamic Selection~~selection of~~ an Internal Mobile IP Home Agent based on user Authentication authentication, wherein the mobile agent stores in a mapping table a traffic encapsulation type used for routing traffic from the mobile agent to the Internal Mobile IP Home Agent;
- d. if no traffic encapsulation type is set in the mapping table, direct routing of the traffic from the mobile agent towards the destination node, and otherwise, if a traffic encapsulation type is set in the mapping table, tunneling of the traffic to and/or from the assigned Internal Mobile Home Agent for this Mobile Node between the mobile agent and the selected Internal Mobile IP Home Agent prior to routing of the traffic from the selected Internal Mobile IP Home Agent toward the destination node; and;
- e. provision of extended authentication, after Mobile IP connection establishment, and during the VPN negotiation phase, based on extra user credentials; or a one-time-password mechanism or similar.

2. (currently amended) The ~~device-module~~ of Claim 1, wherein the mobile agent device appears as a Mobile IP Foreign Agent towards the Internal Mobile IP Home Agent.
3. (currently amended) The ~~device-module~~ of Claim 1, wherein the mobile agent device appears as a Mobile IP Home Agent towards the remotely connecting Mobile Node.
4. (currently amended) The ~~device-module~~ of Claim 1, wherein the mobile agent device provides a dynamically assigned Mobile IP address to the remotely connecting Mobile Node, if requested to do so by the remotely connecting Mobile Node.
5. (currently amended) The ~~device-module~~ of Claim 1, wherein the mobile agent device provides a termination point for IKE & IPSec VPN connections from a remotely connecting Mobile Node.
6. (currently amended) The ~~device-module~~ of Claim 1, wherein the traffic encapsulation type set in the mapping table is IP-encapsulated tunneling is used for transfer of traffic between the mobile agent device and the Internal Home Agent encapsulation.
7. (currently amended) The ~~device-recited-in-module~~ of Claim 1, wherein the traffic encapsulation type set in the mapping table is UDP-encapsulated tunneling is used for transfer of traffic between the mobile agent device and the Internal Home Agent encapsulation.
8. (cancelled)
9. (currently amended) The ~~device-module~~ of Claim 1, wherein IP encapsulated tunneling is used for transfer of traffic between the remotely connecting mobile-node-Mobile Node and the mobile agent device.

10. (currently amended) The ~~device-module~~ of Claim 1, wherein UDP encapsulated tunneling is used for transfer of traffic between the ~~remotely connecting mobile node~~ Mobile Node and the mobile agent device.
11. (currently amended) The ~~device-module~~ of Claim 9 wherein IPSec tunneling is used for protection of the transfer of traffic between the ~~remotely connecting mobile node~~ Mobile Node and the mobile agent device, within said encapsulation.
12. (currently amended) The ~~device-module~~ of Claim 1, further comprising restriction of user access to the internal Mobile IP home agent or to the internal network, until extended user authentication is carried out.
13. (currently amended) The ~~device-module~~ of Claim 1, further comprising time and volume based accounting ~~is carried out~~ on a per Mobile Node basis.
14. (cancelled)
15. (currently amended) The ~~device-module~~ of Claim 10, wherein IPSec tunneling is used for protection of the transfer of traffic between the ~~remotely connecting mobile node~~ Mobile Node and the mobile agent device, within said encapsulation.